

**ABSTRACT**

The present invention relates to porous bone filling materials prepared by sintering bioactive glass fibers in order to achieve a three dimensional block with interconnecting porosity. Due to the osteoconductive properties the bioactive glass fibers, in block form are an ideal scaffold for new tissue (e.g. bone or cartilage) formation to occur. The manufacturing parameters can be adjusted to achieve porosities as high as 90 vol-%, or the manufacturing parameters can be adjusted to prepare strong porous blocks useful in load bearing application.